

Preliminary Data



MICROLV9™ Low Voltage LED Power Driver

Product Overview

The MicroLV™ range of LED Power Drivers is ideal for driving Luxeon™ LEDs from a range of low voltage power supplies.

The compact and efficient power electronics ensure optimum operation of LEDs through a highly stable constant current output.

The wide ranging input voltage enables one driver solution to be used in a host of low voltage LED lighting applications.

A unique power saving mode allows a reduced output current to be selected with a simple switch. This feature is useful in solar recharge and other battery powered applications.



Typical Applications

- Solar powered lighting
- Architectural lighting
- Marker & Orientation lights
- Reading Lamps
- Track Lighting
- Display Cases
- Signalling
- Signage
- Cycle, Caving and Flash Lights
- Point of Sale
- Lumidrives LinkLED™
- LumiDrives HaloLED™

Features

- Compliant with Luxeon™ Power Light Sources
- Energy efficient switch mode power electronics
- Short and open circuit protected
- Low power operating mode
- Long Life (> 50,000 hours)
- Compact form factor
- Meets lighting approbation requirements (CE)
- Can be integral with fixtures or remote mounted
- Also available as PCB module
- Automotive transient protected version available



Electrical Specifications

Input

Input Voltage Range	: V_{in}	: 12 – 24V AC or DC (see note 1)
Frequency	: f	: 0 - 60 Hz
Power Consumption	: P_{in}	: 4.5 – 18 W (see note 2)
Efficiency	: η	: 70 - 80% typical
Insulation		: Non Isolated

Output

		: 350 mA	: 700mA
Power Output Range	: P_{och}	: 2.8 – 12.6 W	: 4.2 – 12.6 W
Output Current	: I_o	: 350mA +/- 7.5%	: 700mA +/- 7.5%
Output Voltage	: V_o	: 8.0 – 36Vdc	: 4.0 – 16 Vdc
Open Circuit Voltage	: V_{oc}	: 40Vdc	: 20Vdc
Ripple Voltage	: V_r	: 50mV pk-pk	: 50mV pk-pk

Dimming (option)	: Via remote switch signal
Dimming range	: 100% or 25 % of Output Current (see note 3)

Note1: Unit is not specified for use with automotive electrical systems. For use on automotive applications a transient suppression device can be fitted to special order. Please contact Lumidrives for information.

Note2: Power consumption and efficiency depend upon input voltage and output load.

Note3: Colour Shift in LED output may occur at low dimming levels please check suitability before specification
Other power reduction options may be available to special order.

Environmental

Operating Ambient Temperature	: T_{op}	: -10°C to + 60°C
Storage Ambient Temperature	: T_{st}	: -20°C to + 80°C
Case Temperature	: T_c	: +85°C
Relative Humidity	: RH	: 80%
Lifetime (failures after 50,000 hours)	: L_{50k}	: 5%

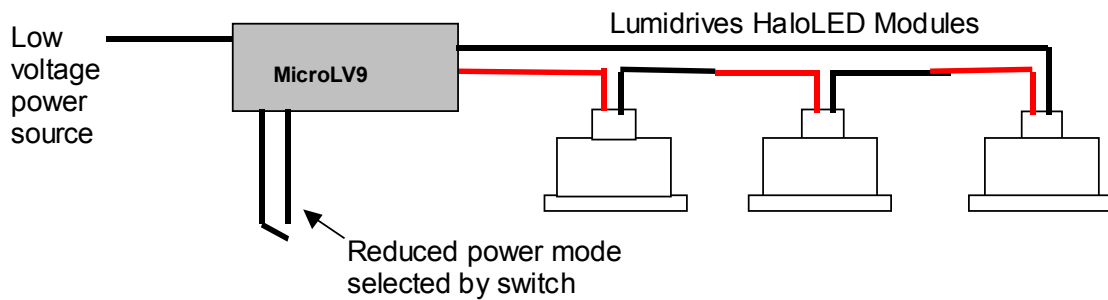
Mechanical Dimensions

Dimensions	: 78 x 34 x 23 mm (excluding fixing lugs)
AC Input	: Screw terminals
LED Output	: Screw terminals
Dimming (option)	: 300mm Flying lead
Mounting	: 2 off 4.0mm fixing holes at 89mm centres

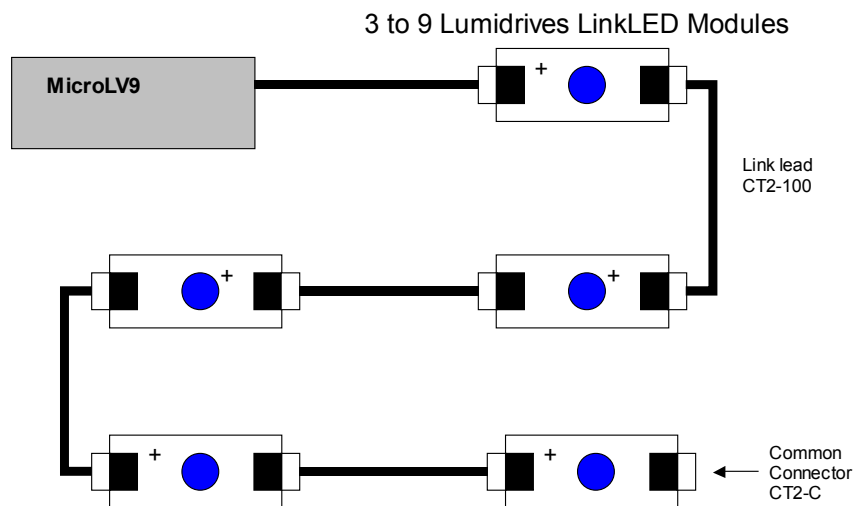


Typical Applications

HaloLED™



LinkLED™



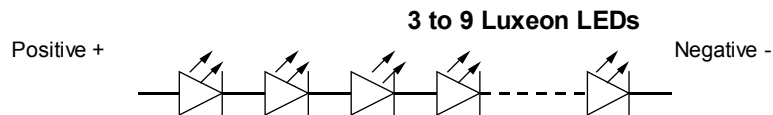
Preliminary Data



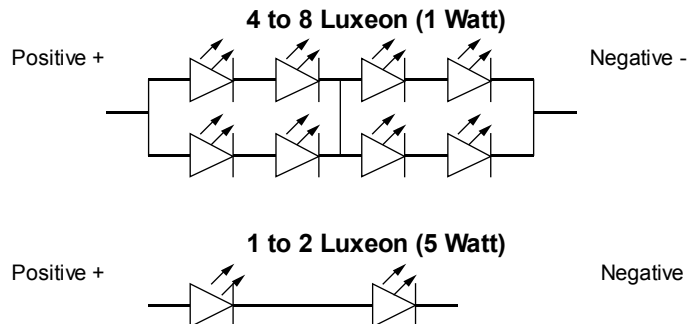
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LED Wiring Diagram

350mA Version

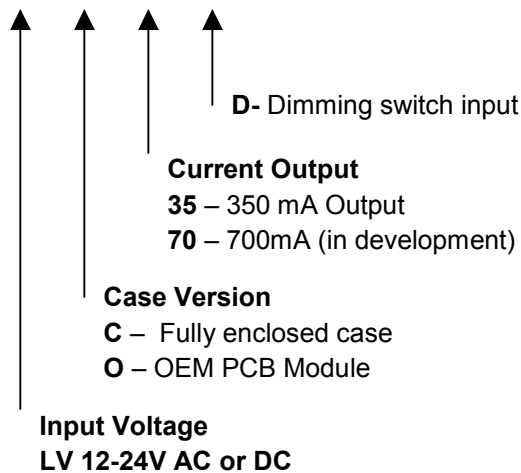


700mA Version



Selection Guide

Part No	Description
MLV9- C- 35 - D	MicroLV9, Output 350mA, Cased, dimming option



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